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DEPARTMENT OF DEFENSE

Office of the Secretary

[Transmittal No. 15-68]

36(b)(1) Arms Sales Notification

AGENCY: Department of Defense, Defense Security Cooperation Agency.

ACTION: Notice.

SUMMARY: The Department of Defense is publishing the unclassified text of a section 36(b)(1) arms sales notification. This is published to fulfill the requirements of section 155 of Public Law 104-164 dated July 21, 1996.

FOR FURTHER INFORMATION CONTACT: Sarah A. Ragan or Heather N. Harwell, DSCA/LMO, (703) 604-1546/ (703) 607-5339.

The following is a copy of a letter to the Speaker of the House of Representatives, Transmittal 15-68 with attached Policy Justification.

Dated: October 23, 2015.

Aaron Siegel,
Alternate OSD Federal Register Liaison Officer,
Department of Defense.



DEFENSE SECURITY COOPERATION AGENCY

201 12TH STREET SOUTH, STE 203
ARLINGTON, VA 22202-5408


The Honorable John A. Boehner
Speaker of the House
U.S. House of Representatives
Washington, DC 20515

OCT 19 2015

Dear Mr. Speaker:

Pursuant to the reporting requirements of Section 36(b)(1) of the Arms Export Control Act, as amended, we are forwarding herewith Transmittal No. 15-68, concerning the Department of the Navy's proposed Letter(s) of Offer and Acceptance to the Kingdom of Saudi Arabia for defense articles and services estimated to cost \$11.25 billion. After this letter is delivered to your office, we plan to issue a news release to notify the public of this proposed sale.

Sincerely,


J. W. Rixey
Vice Admiral USN
Director

Enclosures:

1. Transmittal
2. Policy Justification
3. Sensitivity of Technology
4. Regional Balance (Classified Document Provided Under Separate Cover)



Transmittal No. 15-68

Notice of Proposed Issuance of Letter of Offer
Pursuant to Section 36(b) (1)
of the Arms Export Control Act, as amended

(i) Prospective Purchaser: Saudi Arabia

(ii) Total Estimated Value:

Major Defense Equipment*	\$ 4.30	billion
Other	\$ 6.95	billion
TOTAL	\$ 11.25	billion

(iii) Description and Quantity or Quantities of Articles or Services under Consideration for Purchase: The Government of Saudi Arabia has requested a comprehensive naval modernization program referred to as the Saudi Naval Expansion Program II (SNEP- II). This notification of the next phase of that program will include Multi-Mission Surface Combatant (MMSC) ships and program office support. The MMSC will consist of the following Major Defense Equipment (MDE):

Four (4) MMSC ships (a derivative of the Freedom Variant of the U.S. Navy Littoral Combat Ship (LCS) Class) that incorporate five (5) COMBATSS-21 Combat Management Systems (four (4) installed, one (1) spare) with five (5) TRS-4D Radars (four (4) installed, one (1) spare)

Five (5) Identification Friend or Foe (IFF) (Mode 4- and Mode 5-capable) UPX-29 (four (4) installed, one (1) spare)

Five (5) Compact Low Frequency Active Passive Variable Depth Sonar (four (4) installed, one (1) spare)

Eight (8) MK-41 Vertical Launch Systems (VLS) (two (2) eight-cell assemblies per ship for 16 cells per hull)

Five-hundred thirty-two (532) tactical RIM-162 Evolved Sea Sparrow Missiles (ESSM) (one hundred twenty-eight (128) installed, twenty (20) test and training rounds, three hundred eighty-four (384) spares)

Five (5) AN/SWG-1 (V) Harpoon Ship Command Launch Control Systems (four (4) installed (one (1) per ship), one (1) spare)

Eight (8) Harpoon Shipboard Launchers (two (2) installed four-tube assemblies per ship)

Forty-eight (48) RGM-84 Harpoon Block II Missiles (thirty-two (32) installed, sixteen (16) test and training rounds)

Five (5) MK-15 Mod 31 SeaRAM Close-In Weapon System (CIWS) (four (4) installed, one (1) spare)

One-hundred eighty-eight (188) RIM 116C Block II Rolling Airframe Missiles (RAM) (forty-four (44) installed, twelve (12) test and training rounds, one hundred thirty-two (132) spares)

Five (5) MK-75 76mm OTO Melara Gun Systems (four (4) installed, one (1) spare)

Forty-eight (48) 50-caliber machine guns (forty (40) installed (ten (10) per ship), eight (8) spares); ordnance; and Selective Availability Anti-Spoofing Module (SAASM) Global Positioning System/Precise Positioning Service (GPS/PPS) navigation equipment

Also included in this sale in support of the MMSC are: study, design and construction of operations; support and training facilities; spare and repair parts; support and test equipment; communications equipment employing Link 16 equipment; Fire Control System/Ceros 200 Sensor and Illuminator; 20mm Narwhal Gun; Nixie AN/SLQ-25A Surface Ship Torpedo Defense System; MK-32 Surface Vessel Torpedo Tubes; WBR-2000 Electronic Support Measure and Threat Warning System; Automatic Launch of Expendables (ALEX) Chaff and Decoy-Launching System; ARC-210 Radios; Combined Enterprise Regional Information Exchange System (CENTRIXS); Automated Digital Network System; publications and technical documentation; personnel training and training equipment; U.S. Government and contractor engineering, technical and logistics support services; and other related elements of logistical and program support.

In addition, this case will provide overarching program office support for the SNEP II to include: U.S. Government and contractor engineering, technical and logistics support, and other related elements of program support to meet necessities for program execution.

(iv) Military Department: Navy (SBV, GBZ)

(v) Prior Related Cases, if any: SBU - \$1.9 billion – 20 May 2015

(vi) Sales Commission, Fee, etc., Paid, Offered, or Agreed to be Paid: None

(vii) Sensitivity of Technology Contained in the Defense Article or Defense Services Proposed to be Sold: See Attached Annex

(viii) Date Report Delivered to Congress: 19 Oct 2015

*as defined in Section 47(6) of the Arms Export Control Act.

POLICY JUSTIFICATION

Government of Saudi Arabia - Multi-Mission Surface Combatant (MMSC) Ships

The Government of Saudi Arabia has requested a naval modernization program to include the sale of Multi-Mission Surface Combatant (MMSC) ships and program office support. The Multi-Mission Surface Combatant program will consist of:

Four (4) MMSC ships (a derivative of the Freedom Variant of the U.S. Navy Littoral Combat Ship (LCS) Class) that incorporate five (5) COMBATSS-21 Combat Management Systems (four (4) installed, one (1) spare) with five (5) TRS-4D Radars (four (4) installed, one (1) spare)

Five (5) Identification Friend or Foe (IFF) (Mode 4- and Mode 5-capable) UPX-29 (four (4) installed, one (1) spare)

Five (5) Compact Low Frequency Active Passive Variable Depth Sonar (four (4) installed, one (1) spare)

Eight (8) MK-41 Vertical Launch Systems (VLS) (two (2) eight-cell assemblies per ship for 16 cells per hull)

Five-hundred thirty-two (532) tactical RIM-162 Evolved Sea Sparrow Missiles (ESSM) (one hundred twenty-eight (128) installed, twenty (20) test and training rounds, three hundred eighty-four (384) spares)

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Eight (8) Harpoon Shipboard Launchers (two (2) installed four-tube assemblies per ship)

Forty-eight (48) RGM-84 Harpoon Block II Missiles (thirty-two (32) installed, sixteen (16) test and training rounds)

Five (5) MK-15 Mod 31 SeaRAM Close-In Weapon System (CIWS) (four (4) installed, one (1) spare)

One-hundred eighty-eight (188) RIM 116C Block II Rolling Airframe Missiles (RAM) (forty-four (44) installed, twelve (12) test and training rounds, one hundred thirty-two (132) spares)

Five (5) MK-75 76mm OTO Melara Gun Systems (four (4) installed, one (1) spare)

Forty-eight (48) 50-caliber machine guns (forty (40) installed (ten (10) per ship), eight (8) spares); ordnance; and Selective Availability Anti-Spoofing Module (SAASM) Global Positioning System/Precise Positioning Service (GPS/PPS) navigation equipment

Also included in this sale in support of the MMSC are: study, design and construction of operations; support and training facilities; spare and repair parts; support and test equipment; communications equipment employing Link 16 equipment; Fire Control System/Ceros 200 Sensor and Illuminator; 20mm Narwhal Gun; Nixie AN/SLQ-25A Surface Ship Torpedo Defense System; MK-32 Surface Vessel Torpedo Tubes; WBR-2000 Electronic Support Measure and Threat Warning System; Automatic Launch of Expendables (ALEX) Chaff and Decoy-Launching System; ARC-210 Radios; Combined Enterprise Regional Information Exchange System (CENTRIXS); Automated Digital Network System; publications and technical documentation; personnel training and training equipment; U.S. Government and contractor engineering, technical and logistics support services; and other related elements of logistical and program support.

In addition, this case will provide overarching program office support for the SNEP II to include: U.S. Government and contractor engineering, technical and logistics support, and other related elements of program support to meet necessities for program execution. The estimated value of MDE is \$4.3 billion. The total estimated cost is \$11.25 billion.

This proposed sale will contribute to the foreign policy and national security goals of the United States by helping to improve the security of a strategic regional partner, which has been, and continues to be, an important force for political stability and economic progress in the Middle East. This acquisition will enhance the stability and maritime security in the sea areas around the Arabian Peninsula and support strategic objectives of the United States.

The proposed sale will provide Saudi Arabia with an increased ability to meet current and future maritime threats from enemy weapon systems. The Multi-Mission Surface Combatant ships will provide protection-in-depth for critical industrial infrastructure and for the sea lines of communication. Saudi Arabia will use the enhanced capability to keep pace with the rapid advances in technology and to remain a viable U.S. coalition partner in the region.

The proposed sale of this equipment and support will not alter the basic military balance in the region.

The principal contractor for the Multi-Mission Surface Combatant will be Lockheed Martin Corporation of Bethesda, Maryland. There are no known offset agreements in connection with this potential sale.

Implementation of this proposed sale will require the assignment of additional U.S. Government and/or contractor representatives to Saudi Arabia.

There will be no adverse impact on U.S. defense readiness as a result of this proposed sale.

Transmittal No. 15-68

Notice of Proposed Issuance of Letter of Offer
Pursuant to Section 36(b)(1)
of the Arms Export Control Act, as amended

Annex
Item No. vii

(vii) Sensitivity of Technology

1. The Multi-Mission Surface Combatant (MMSC) Ship, a derivative of the U.S. Navy Freedom Class Littoral Combat Ship, will provide Saudi Arabia with an increased ability to identify, engage, and defeat maritime security threats in the open waters of the Arabian Gulf and the Red Sea. These vessels will deliver protection-in-depth for Saudi Arabia industrial infrastructure and for the sea lines of communication. The MMSC carries several sensors and data links to enhance its ability to work in a network centric battle group. The mission equipment subsystem consists of the following sensors and subsystems: TRS-40 Radar, Identification Friend or Foe (IFF) interrogator, Compact Low Frequency Active Passive Variable Depth Sonar, and Electronic Support Measures (ESM). The MMSC processes sensor data and transmits data via Link 16 equipment. The MMSC is capable of carrying Harpoon Block II missiles and Evolved Sea Sparrow missiles, as well as, Mk 46 or Mk 54 torpedoes to engage surface and sub-surface targets. (Note that the MMSC will include provisions for both the Mk 46 and the Mk 54 light weight torpedoes but torpedoes are not included in this sale.) The MMSC weapons system is classified up to SECRET. Unless otherwise noted below, MMSC hardware and support equipment, test equipment and maintenance spares are UNCLASSIFIED except when electrical power is applied to hardware containing volatile data storage. Technical data and documentation for MMSC weapons systems (to include sub-systems and weapons listed below) are classified up to SECRET. The sensitive technologies include:

a. COMBATSS-21 is the ship's battle management system, which is produced by Lockheed Martin and derived from the U.S. Navy's latest Aegis surface combatants. The COMBATSS-21 Combat Management System is the backbone of the Freedom-variant self-defense suite and integrates the radar, electro-optical infrared cameras, gun fire control system, countermeasures and short-range anti-air missiles. COMBATSS-21 provides a flexible, reliable next generation defense system classified to the level of SECRET.

b. TRS 4D Radar is a three-dimensional, air volume surveillance radar with fast target alert, which provides target designation to combat management system for anti-air warfare (AAW) and anti-surface warfare (ASuW). It provides sensor support for surface

gun fire control with splash detection, ship-controlled helicopter approach support, jammer detection, tracking and suppression, cued search with enhanced detection performance for a dedicated sector, cued track with high-accuracy target tracking for missile guidance, and target classification, integrated IFF, and is integrated with the combat management system. The system is available internationally through Airbus Defense and Space. The TRS 4D radar system is UNCLASSIFIED and does not contain classified data. However, when connected to COMBATSS-21, the TRS 4D radar is classified SECRET.

c. Fire Control System/Ceros 200 Sensor and Illuminator supports engagements with either main gun battery or semi-active surface-to-air missile systems. The Ceros 200 Illuminator is a fully stabilized radar and optronic tracking system, which when working in combination with a missile and gun fire control system provides tracking and illumination functions against advanced sea-skimming missiles and asymmetric surface threats in littoral environments. When installed in a continuous wave illumination configuration with the surface to air missile control module, the system provides an X-band channel for continuous wave illumination of a target to support guidance of the semi-active surface-to-air missile. The Ceros 200 Illuminator can also be combined with gun fire control and SAM modules to provide precision control for any naval gun or a semi-active surface-to-air missile system. The CEROS 200 is available internationally through Saab. A separate gyro cam EO/IR camera/ laser illuminator can also provide additional, independent situational awareness and cue an engagement to the fire control system. When connected to COMBATSS-21, the fire control system/Ceros 200 Sensor and Illuminator is classified SECRET.

d. SeaRAM Anti-Ship Missile Defense System engages multiple, high-performance, air and surface threats, from subsonic to supersonic. SeaRAM blends capabilities from the Phalanx Close-In Weapon System (CIWS) and the RIM-116C Block II Rolling Airframe Missile (RAM) Guided Weapon System. An 11-missile RAM launcher assembly provides extended range and high maneuverability missiles paired with the Phalanx Block 1B's high resolution search-and-track sensor systems and quick-response capability. SeaRAM is an end-to-end track- to-engage system and contains classified algorithms, up to a level of SECRET.

e. MK-41 Vertical Launch System (VLS) is a multi-cell, vertical missile launcher that accommodates multiple VLS capable missiles, including the Evolved Sea Sparrow Missile (ESSM), Standard Missile 2 (SM-2), and Vertical Launch Anti-Submarine Rocket (ASROC) Lightweight Hybrid Torpedo. This case only provides tactical VLS capability for ESSM. Guidance data exchanged with COMBATSS-21 will be classified to the level of SECRET.

f. Evolved Sea Sparrow Missile (ESSM) is a medium-range, semi-active, homing missile that provides reliable ship self-defense capability against agile, high-speed, low-altitude, anti-ship cruise missiles, low velocity air threats, such as helicopters, and high-speed maneuverable surface threats. ESSM's tracking performance and agile kinematics result

from S and X-band midcourse uplinks, high average velocity and tail control. The MK 25 quad pack canister is used for MK-41 VLS-equipped ships. ESSM is part of a 10-nation international cooperative development program between the United States, North Atlantic Treaty Organization (NATO) partner nations, and Australia and is a kinematic upgrade to the RIM-7P Sea Sparrow Missile that leverages U.S. guidance technology. This case will provide a VLS configuration that supports only tactical ESSM employment. Guidance data exchanged with COMBATSS-21 will be classified to the level of SECRET.

g. The MK-75 76mm Super Rapid (SR) Gun Mount is a multi-mission, rapid-fire naval gun for primary defense against air and surface threats and for employment in naval fire support missions. The MK-75 76mm provides an accurate, sustained firing rate from 1 to 120 rounds per minute, and is capable against subsonic, anti-ship missiles. Optional add-ons provide capabilities to reduce the impact of gun radar cross-section, improve gun accuracy, and facilitate automated gun feed of multiple ammunition types on the fly. The system is available internationally through OTO Melara. When the 76mm gun is connected to the gun fire control system, which is in-turn connected to COMBATSS-21, it is classified SECRET.

h. The 20mm Narwhal gun is a gyro-stabilized mount armed with a 20mm automatic cannon, an electro-optic, charge-coupled device camera, and a closed loop, fire-control system, which can be controlled remotely to enable system operation, target acquisition and tracking, and fire opening by the gun operator. Optional add-ons include a thermal camera, laser rangefinder, and target automatic tracking video system. The 20mm gun has a firing rate of 800 rounds per minute of NATO standard ammunition, and is produced by the French Government-owned Nexter Systems. When connected to COMBATSS-21 for cueing, the Narwhal gun will be classified SECRET.

i. The Browning M2 50 caliber machine gun is an air-cooled, belt-fed machine gun that fires from a closed bolt, operated on the short recoil principle. The M2 is a secondary weapon for anti-boat defense on large naval vessels (corvettes, frigates, destroyers, cruisers, etc.). The M2 Heavy Barrel (HB), air-cooled ground gun has a cyclical rate of 450-575 rounds per minute with an effective stabilized range of 2000 yards (significantly shorter unstabilized). The Browning machinegun is UNCLASSIFIED.

j. Harpoon Block II is based on the Harpoon, which is an all-weather, over-the-horizon, sea skimming, anti-ship missile system. Harpoon Block II (RGM-84L) improvements include the inertial measurement unit from the Joint Direct Attack Munitions (JDAM) program and software, computer, Global Positioning System (GPS)/inertial navigation system and GPS antenna/receiver from SLAM Expanded Response (SLAM-ER). Block II Harpoon has improved targeting capabilities, a larger engagement envelope, and higher resistance to electronic countermeasures, and consequently, provides a littoral, anti-ship capability. Data exchanged with COMBATSS-21 will be classified to the level of SECRET.

k. The Nixie AN/SLQ-25A Surface Ship Torpedo Defense System is a torpedo

countermeasures system that is a digitally controlled, modular design, electro-acoustic soft kill countermeasure decoy system capable of countering wake homing torpedoes, acoustic homing torpedoes, and wire guided torpedoes. The SLQ-25A provides active/passive detection, location, threat identification of torpedoes and other acoustic targets. The SLQ-25's towed body, the decoy which diverts the threat from the ship, connects to the management system using fiber optic cable to control the signals emitted by the decoy. The data are classified to the level of SECRET.

l. Compact Low Frequency Active Passive Variable Depth Sonar is a key sensor technology for identifying conventional, diesel-powered submarines operating in difficult sonar environments such as littoral waters. The Compact Low Frequency Active Passive Variable Depth Sonar offers a single winch to tow both the transmit tow body and the receive array. The system has a transmit array providing 360-degree bearing, omni-directional transmission and a receive array that instantly resolves right/left ambiguity issues. When connected to COMBATSS-21 data up to the level of SECRET are exchanged.

m. MK-32 Surface Vessel Torpedo Tubes (SVTT) handle the MK-46 and Mk-54 torpedo subsurface warfare weapons on a variety of surface combatants. It is an ASW-launching system that pneumatically launches torpedoes over-the-side of the ship using weatherproof, triple-tube sets that can be rotated or trained to face a target. Launching is powered by compressed air in a rear flask and the torpedoes are fire-and-forget weapons. The MK-46 Torpedo is a high-speed, deep-running, acoustic-homing, anti-submarine weapon. SVTT launches torpedoes under local control or remote control from an ASW fire control system. The tubes are also capable of storing torpedoes for long periods, but this is only practical with regular maintenance. When connected to COMBATSS-21 data exchange is classified to the level of SECRET.

n. WBR-2000 is an electronic support measure and threat warning system designed for smaller surface naval combatants and for coastal surveillance. Radar signals, received by the antenna assembly through an omni-directional antenna and an array of directional antennas, are passed to the receiver/processor unit where frequency and angle of arrival of each radar pulse are measured and digitized. The data then passes to a signal processor that associates all pulses received from an individual radar with each other, measures the pulse train modulation characteristics, and forms a report characterizing the radar. These reports are compared with an organic, stored library of radar parameters to identify the type of radar and the platform normally associated with the intercepted radar signal. The emitter is reported parametrically whether or not it is in the library. A computer workstation is used to store the reports and display the data to the operator. The contents of the library are typically classified CONFIDENTIAL or SECRET.

o. The Automatic Launch of Expendables (ALEX) is a chaff and decoy-launching system. Off-board decoys provide the lowest risk and offer the most cost effective method to aid in ship survival. It is a mortar-tube launching system consisting of two or more launchers, each containing six tubes arranged in two parallel rows of either all 45-

degree tubes, or a mixture of 45 and 60-degree tubes depending on the specific launcher variant installed. RF, IR, RF-IR rounds and some specialty decoys are capable of being launched from the ALEX system depending on the particular threat. Decoys are launched from the bridge launcher control in the pilothouse or master control panel located in the mission control center. Launchers must be manually loaded/re-loaded, when required, from ready service storage lockers located in the vicinity of the launchers. When connected to WBR-2000 data up to the level of SECRET is exchanged.

p. The ARC-210 is a family of radios for military aircraft that provides two-way, multi-mode voice and data communications over a Very High Frequency (VHF) I Ultra High Frequency (UHF) frequency range. ARC-210 radios contain embedded sensitive encryption algorithms and keying material. ARC-210 hardware is UNCLASSIFIED. When electrical power is applied and mission data loaded, the ARC-210 is classified up to SECRET.

q. Combined Enterprise Regional Information Exchange System (CENTRIXS) enables ship-to-ship operational dialogue, often encrypted, between vessels of other nations in both text and web based formats.

r. Identification, Friend or Foe (IFF) Mode 4 (5 Capable) is an identification system designed for command and control. It enables military and national (civilian air traffic control) interrogation systems to identify aircraft, vehicles or forces as friendly. Mode 5 provides a cryptographically secured version of Mode S and ADS-8 GPS position. Data can be classified up to SECRET.

s. Global Command and Control System-Joint (GCCS-J) is a command, control, communications, computers, and intelligence system consisting of hardware, software (commercial-off-the shelf and government off-the-shelf), procedures, standards, and interfaces that provide an integrated near real-time picture of the battlespace necessary to conduct joint and multinational operations. Data can be classified up to SECRET.

t. GPS/PPS/SAASM -Global Positioning System (GPS) provides a space-based Global Navigation Satellite System (GNSS) that has reliable location and time information in all weather and at all times and anywhere on or near the Earth when and where there is an unobstructed line of sight to four or more GPS satellites. Selective Availability/ Anti-Spoofing Module (SAASM) (AN/PSN-11) is used by military GPS receivers to allow decryption of precision GPS coordinates. The GPS hardware is UNCLASSIFIED. When electrical power is applied, the system is classified up to SECRET.

u. Automated Digital Network System furnishes autonomous, digital, interoperable, joint and secure LAN/WAN management and control for RF assets on demand aboard ships and at shore sites. It also ensures worldwide communications connectivity, automates all communications systems, and replaces several unique subnetworks with a single integrated network hub.

v. Link 16 equipment is a military tactical data exchange network used by the United States and North Atlantic Treaty Organization (NATO) member nations allowed by the MIDS International Program Office. Its specification is part of the family of tactical data links. With Link 16 equipment, military aircraft as well as ships and ground forces may exchange their tactical picture in near-real time. Link 16 equipment also supports the exchange of text messages, imagery data and provides two channels of digital voice.

2. If a technologically advanced adversary were to obtain knowledge of the specific hardware and software elements, the information could be used to develop countermeasures which might reduce weapon system effectiveness or be used in the development of a system with similar or advanced capabilities.

3. A determination has been made that the recipient country can provide substantially the same degree of protection for the sensitive technology being released as the U.S. Government. This sale is necessary in furtherance of the U.S. foreign policy and national security objectives outlined in the Policy Justification.

4. All defense articles and services listed in this transmittal have been authorized for release and export to Saudi Arabia.

[FR Doc. 2015-27505 Filed: 10/28/2015 8:45 am; Publication Date: 10/29/2015]